

# LOUISVILLE MEDICAL NEWS:

A WEEKLY JOURNAL OF MEDICINE AND SURGERY.

J. W. HOLLAND, A.M., M.D.,

H. A. COTTELL, M.D.,

} Editors.

JOHN P. MORTON & CO., Publishers.

## CONTENTS.

### MISCELLANY—

Langenbeck's Successor, . . . . .	97
Cooling Water, . . . . .	97
Elephas Primigenius, . . . . .	97
Purification of Water, . . . . .	97
New Method of Detecting Stone in the Bladder, . . . . .	97
Hydrophobia from Fear, . . . . .	98
An Opportunity for the Muse, . . . . .	98
Bed-linen Stained Yellow by the Perspiration, . . . . .	98
Too Much Writing in Primary Schools, . . . . .	98
A Hint to Druggists, . . . . .	98

### ORIGINAL—

The Presence of the Micrococcus in the Blood of Malignant Measles; its Importance in Treatment. By John M. Keating, M.D., . . . . .	99
---	----

### CORRESPONDENCE—

Jaborandi, . . . . .	103
----------------------	-----

### REVIEWS—

The Change of Life in Health and Disease, . . . . .	105
---	-----

### BOOKS AND PAMPHLETS, . . . . .

### FORMULARY, . . . . .

### SELECTIONS—

Uterine Hemostatics, . . . . .	107
Uremic Convulsions and Coma Successfully Treated by Hypodermic Injections of Pilocarpin, Chloral, and Benzoic Acid, . . . . .	107
The Scientific Principles of Inhalation, . . . . .	108
A Case of Poisoning by Brucia, . . . . .	108
Surgical Treatment of Granular Ophthalmia, . . . . .	108

AMERICAN PRACTITIONER.

Monthly, \$3.00 a Year.

JOHN P. MORTON & CO.

PUBLISHERS.

LOUISVILLE MEDICAL NEWS.

Weekly, \$3.00 a Year.

440 to 446 West Main Street, LOUISVILLE, KY.

THE LOUISVILLE MEDICAL NEWS and the AMERICAN PRACTITIONER will be sent to one address for one year to advance-paying subscribers for five dollars. Address publishers.

# NEW BOOKS

### MEMORANDA OF PHYSIOLOGY. By

HENRY ASHBY, M.D. (London). Third edition, thoroughly revised, with additions and corrections by an American editor. An important addition to the popular series, Wood's Pocket Manuals. 18mo, 332 pages, fine muslin binding. Sent by mail, postpaid, on receipt of price . . . . . \$1.00

### CHRONIC BRONCHITIS: ITS FORMS AND TREATMENT. With numerous illustrations. Cloth . . . . .

1.50

### A TREATISE ON THE SCIENCE AND PRACTICE OF MEDICINE, or the Pathology and Therapeutics of Internal Diseases. By ALONZO B. PALMER, M.D., LL.D. Part I. General Pathology, General Diseases, Diseases of the Organs of Digestion and Assimilation. Cloth . . . . .

5.00

### A TREATISE ON THE DISEASES OF THE NERVOUS SYSTEM. By JAS. ROSS, M.D. In two large octavo volumes. Illustrated with Lithographs, Photographs, and 280 Wood Engravings. Sent by mail, postpaid, on receipt of price . . . . .

\$14.00

### The INCIDENTAL EFFECTS OF DRUGS. A Pharmacological and Clinical Handbook. By Dr. L. LEWIN. Translated from the German by W. T. ALEXANDER, M.D. Cloth . . . . .

3.00

### A CLINICAL HANDBOOK on the DISEASES OF WOMEN. By W. SYMINGTON BROWN, M.D. Cloth . . . . .

2.50

### A POCKET-BOOK OF PHYSICAL DIAGNOSIS; for the Student and Physician. By Dr. EDWARD T. BRUEN. With Wood Engravings. Cloth . . . . .

2.00

JOHN P. MORTON & CO., Louisville, Ky.

FULL STOCK OF MEDICAL BOOKS ALWAYS ON HAND

ISSUED EVERY SATURDAY.

THE IMPROVED  
**Harris Electro-Medical, Galvanic, and Faradic Batteries,**  
 PATENTED AND MANUFACTURED BY  
**A. C. HARRIS, Louisville, Ky.**



**FOR PHYSICIANS AND FAMILIES**

Electro-medical appliances of all kinds supplied at reasonable prices.

Medical batteries of every description repaired at the shortest notice.

Good reliable agents wanted in all parts of the United States and Canada.

For illustrated catalogues, testimonials, price-lists, agencies, or any information concerning the batteries, address

**G. T. CRAVEN & CO.,**

General Agents for the United States and Canada.

141 and 143 Race Street, Cincinnati, O.

And 536 Third Street, Louisville, Ky.

QUALITY FIRST.

ESTABLISHED 1817.

**ARTHUR PETER & CO.**

**LOUISVILLE, KY.**

**Importers and Wholesale Druggists,**

**MANUFACTURING PHARMACISTS.**

Dealers in Druggists' Sundries, Choice Pharmaceutical Preparations. Original makers of Aromatic Elixir Grindelia, Aromatic Anti-constipation Elixir, Aromatic Elixir Licorice, Instruments of all kinds, Atomizers and Douches.

DEPOT FOR PARKE, DAVIS & CO.'S PREPARATIONS.

**THE NEWCOMB-BUCHANAN CO.**

**DISTILLERS**

AND

**Wholesale Whisky Merchants**

PROPRIETORS OF THE CELEBRATED

**ANDERSON AND NELSON DISTILLERIES**

Producing the very highest grades of Sour-mash and Fire-copper

**BOURBON AND RYE WHISKIES,**

**34 Fourth St., LOUISVILLE, KY**

**RUSH MEDICAL COLLEGE.**

**CHICAGO, ILLINOIS.**

For Annual, Spring Course, or Post Graduate Announcement, address the Secretary,

**JAMES H. ETHERIDGE, .**

1634 Michigan Avenue.





# ELIXIR OF WAHOO.

JUNE 1, 1882.

In 1879 we issued circulars asking the consideration and trial by Physicians of the Elixir and Fluid Extract of Wahoo. As stated in these circulars, we were influenced by the favorable therapeutic results reported by a number of leading medical men who tested it in their practice, at the suggestion of Dr. J. R. Black, in a paper published in the Philadelphia Medical and Surgical Reporter. Since that time it has been very largely used.

Its value as a remedy in Hepatic-Dyspepsia, or Biliousness, and in all cases in which a gastric tonic-cholagogue is indicated, has been established beyond question.

The demand created exceeded our ability to supply. For months we were unable to fill our orders, as it was impossible to secure the drug, of satisfactory quality, at any price.

We were forced to decline orders, or send but a small percentage of the quantity directed. It has only been within the last few months that we have had sufficient stock of the *bark of the root* (which is the *only* part of the shrub of any medicinal value), gathered at the right season.

The high price of the bark of the root, and the difficulty of procuring it, induced some houses who claimed their preparations were equal to the same articles made by us, to manufacture the Elixir and Fluid Extract of Wahoo from the twigs, small roots, and bark of the tree, the use of these products resulting in disappointment in the effect desired and prejudicing physicians against this really valuable medicine.

We will be glad to send a sample of the Elixir, sufficient to test fully its merits, to any reputable medical man who will pay express charges (as we are unable to send by mail), confident a trial will confirm all we claim as to its value and our belief in its superiority in every respect to Podophyllin, Leptandrin, Iridin, and in fact any of the indigenous cholagogues and tonics, some of which are largely used and deservedly held in high esteem.

We can not too strongly recommend it for patients suffering from torpid liver, and deranged stomach, resulting from too free use of wine and spirits. It will be found to give speedy relief. A tablespoonful of the Elixir should be administered every other night for a week. It should then be given as often in one to two teaspoonful doses until relieved.

The value of Wahoo is so readily determined from absolute therapeutic results by physicians testing it, for a few days, that we again urge them to use in any case in which a cathartic effect is desired, with conjoint action upon the liver.

We will be pleased to mail our pamphlet on the above to any Physician desiring to read it.

**JOHN WYETH & BRO.**

**MANUFACTURING CHEMISTS.**

**PHILADELPHIA.**



TO THE MEDICAL PROFESSION.

# LACTOPEPTINE

We take pleasure in calling the attention of the Profession to LACTOPEPTINE. After a long series of careful experiments we are able to produce its various components in an absolutely pure state, thus removing all unpleasant odor and taste (also slightly changing the color). We can confidently claim that its digestive properties are largely increased thereby, and can assert without hesitation that it is as perfect a digestive as can be produced.

LACTOPEPTINE is the most important remedial agent ever presented to the Profession for Indigestion, Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from imperfect nutrition. It contains the five active agents of digestion, viz: Pepsin, Pancreatine, Diastase, or Veg. Ptyalin, Lactic and Hydrochloric Acids, in combination with Sugar of Milk.

## FORMULA OF LACTOPEPTINE.

Sugar of Milk, . . . . .	40 ounces.	Veg. Ptyalin or Diastase . . . . .	4 drams.
Pepsin, . . . . .	8 ounces.	Lactic Acid, . . . . .	5 fl. drams.
Pancreatine, . . . . .	6 ounces.	Hydrochloric Acid, . . . . .	5 fl. drams.

LACTOPEPTINE is sold entirely by Physicians' Prescriptions, and its almost universal adoption by physicians is the strongest guarantee we can give that its therapeutic value has been most thoroughly established.

The undersigned, having tested LACTOPEPTINE, recommend it to the Profession.

ALFRED L. LOOMIS, M.D.,

*Professor of Pathology and Practice of Medicine, University of the City of New York.*

SAMUEL R. PERCY, M.D.,

*Professor Materia Medica, New York Medical College.*

F. LE ROY SATTERLEE, M.D., Ph.D.,

*Prof. Chem., Mat. Med., and Therap. in N. Y. Col. of Dent.; Prof. Chem. and Hygiene in Am. Vet. Col. etc.*

JAS. AITKEN MEIGS, M.D., Philadelphia, Pa.,

*Prof. of the Institutes of Med. and Med. Juris., Jeff. Medical College; Phy. to Penn. Hos.*

W. W. DAWSON, M.D., Cincinnati, Ohio,

*Prof. Prin. and Prac. Surg., Med. Col. of Ohio; Surg. to Good Samaritan Hospital.*

ALFRED F. A. KING, M.D., Washington, D. C.,

*Prof. of Obstetrics, University of Vermont.*

D. W. YANDELL, M.D.,

*Prof. of the Science and Art of Surg. and Clinical Surg., University of Louisville, Ky.*

L. P. YANDELL, M.D.,

*Prof. of Clin. Med., Diseases of Children, and Dermatology. University of Louisville, Ky.*

ROBT. BATTEY, M.D., Rome, Ga.,

*Emeritus Prof. of Obstetrics Atlanta Med. College, Ex-Pres. Med. Association of Ga.*

CLAUDE H. MASTIN, M.D., LL.D., Mobile, Ala.

PROF. H. C. BARTLETT, Ph.D., F.C.S., London, England.

## THE NEW YORK PHARMACAL ASSOCIATION.

P. O. BOX 1574.

10 AND 12 COLLEGE PLACE, NEW YORK

# NESTLE'S MILK FOOD.

## ITS PREPARATION AND VALUE FOR INFANTS.

**Preparation.**—For an infant under three months, mix one tablespoonful of the Food with ten of hot or cold water. Hold over the gas, lamp, or stove, with constant stirring, until it has boiled two or three minutes. Cool to about blood heat, and give in feeding-bottle. For a child three to ten months old, mix in proportion of eight of water to one of Food. For a pap, in proportion of five of water to one of Food.

**Value.**—Containing only Milk, Wheaten Bred Crust, and Sugar, this Food supplies all the elements necessary for complete alimentation, in the most easily assimilable form; the *Milk* furnishing Casein, Albumen, Hydrates of Carbon, and Sugar of Milk, while the *Wheaten Bred Crust* supplies Nitrogen, and is especially rich in *Saline Matter*, particularly in potash salts, mainly in the form of phosphates, and Carbon is obtained from the *Cane Sugar*. It makes pure blood, firm flesh, hard muscle, and tough bone. It is a sure preventive of Summer Complaint, and by its use the bowels can be kept in just the state desired. It is retained on the stomach often when everything else is rejected. The simplicity of its preparation and the uniformity obtainable are two points, the value of which can not be overestimated.

**Particular Attention.**—We do not claim that this Food will agree with *all* children. We do not think that any artificial food will ever be made which will do this, as nature sometimes fails, a mother's milk not agreeing with her own child. We only claim, what has been proved by its use for fifteen years past, that it will agree with a *larger proportion* of children than any other artificial food.

A pamphlet, by Prof. H. Lebert, of Berlin, giving fuller particulars of the Food, sent to any address on application to

**THOMAS LEEMING & CO., Sole Agents,**

**18 COLLEGE PLACE, NEW YORK CITY.**

For a perfectly pure **CONDENSED MILK**, free from starch of any kind, try Nestle's.

ew—370

### MULTUM IN PARVO.

NO PRACTICING PHYSICIAN CAN AFFORD TO BE WITHOUT IT!

## The American Practitioner's Simplified Visiting List and Account Book.

(COPYRIGHTED.)

This improved Visiting List and Account Book, which is so arranged as to be conveniently carried in the coat-pocket, contains a NEW and SIMPLIFIED SYSTEM of keeping the accounts of practicing physicians with their patients, and which is so simple, complete, and accurate as to entirely dispense with the use of ALL other books, being complete and perfect within itself, and avoiding the necessity of posting or transferring the accounts, thus saving a great deal of writing, time, and labor.

The book is 3 x 7½ inches (a good pocket size), handsomely and substantially bound in real Russia or Morocco, with Tuck, printed on bond paper.

No. 1600—Arranged for 200 Patients, Price, each	\$3 50
No. 1602 " " 300 " " "	4 50
No. 1604 " " 400 " " "	5 50

Sent to any address, postage paid, on receipt of price.

Full descriptive circular sent on application.

**TERRELL, DIETZ & CO., Publishers,**  
514 W. Main St., Louisville, Ky.

## Medical Education.

The Cincinnati College of Medicine and Surgery. Forty-eighth regular session, 1882-3. Full faculty, fine Clinics and unsurpassed facilities. Fees: Matriculation \$5; Professor's ticket For Catalogue, address the **DEAN**.

**\$35**

## COMMERCIAL AND LEGO-MEDICAL CHEMICAL ANALYSES,

Such as the determination of the value of Coals, Iron, Minerals, and Fertilizers; analysis of Medicinal and other Waters; Chemical and Microscopic Examinations of Urine, Pus, and Blood; Examination for Poisons, and general Lego-medical Investigations requiring the services of a Chemist. Address

**J. P. BARNUM, M.D., Analytic Chemist,**

**LOUISVILLE, KY.**

# TO PHYSICIANS. LISTERINE.

**FORMULA.**—Listerine is the *essential Antiseptic* constituent of Thyme, Eucalyptus, Baptisia, Gaultheria, and Mentha Arvensis in combination. Each fluid dram also contains two grains of refined and purified Benzo-Boric Acid.

**DOSE.**—One teaspoonful three or more times a day (as indicated). As a local application to ulcers, wounds, and abscesses, or as a gargle, mouth-wash, inhalant, or injection, it can be used *ad libitum*, diluted as desired.

LISTERINE is a powerful, safe, and pleasant Antiseptic. The beneficial results following its use in Phthisis, Diphtheria, Catarrh, Dysentery, Scarlatina, Erysipelas, Smallpox, Typhoid and Malarial Fevers, etc. proves it to be a restorative Antiseptic of the very highest order of merit. It is the most efficient agent to disinfect the hands after surgical or gynecological operations, and is the best injection in Leucorrhœa, Gonorrhœa, etc. used in the proportion of from two to sixteen parts water, and one part Listerine.

Full Clinical Notes from the following and many other well-known physicians sent upon request:

## PHILIP S. WALES,

Surgeon-General, United States Navy.

### CHRISTOPHER JOHNSON, M.D.

*Emeritus Professor of Surgery, University of Maryland, etc. etc.*

### MONTROSE A. PALLEN, M.D., LL.D.

*Professor of Gynecology, University of the City of New York, and Surgeon to the Maternity Hospital, etc.*

### HENRY O. MARCY, M.D.

*Boston.*

### W. W. DAWSON, M.D.

*Professor of Surgery, Medical College of Ohio, etc.*

### EDWARD W. JENKS, M.D., LL.D.

*Professor of Diseases of Women, and of Clinical Gynecology, Chicago Medical College.*

### H. P. C. WILSON, M.D.

*Ex-President Medical and Chirurgical Faculty of Maryland, and Baltimore Academy of Medicine; Vice-Prest. American Gynecological Society.*

### OSCAR J. COSKERY, M.D.

*Professor of Surgery, College of Physicians and Surgeons, Baltimore.*

### E. R. PALMER, M.D.

*Professor of Physiology and Physical Diagnosis, University of Louisville.*

### HARVEY L. BYRD, A.M., M.D.

*PRESIDENT; Professor of Obstetrics and Diseases of Women and Children, Baltimore Medical College.*

### JOHN A. OCTERLONY, A.M., M.D.

*Professor of the Principles and Practice of Medicine, Kentucky School of Medicine.*

### E. B. STEVENS, A.M., M.D.

*President Cincinnati Obstetrical Society.*

### E. H. GREGORY, M.D.

*Professor of Surgery, St. Louis Medical College.*

### T. F. PREWITT, M.D.

*DEAN; Professor of Surgery, Missouri Medical College, Surgeon to St. John's Hospital, etc.*

### P. V. SCHENCK, M.D.

*Surgeon in charge St. Louis Female Hospital.*

### W. L. BARRETT, M.D.

*Lecturer on Diseases of Women, St. Louis Medical College.*

### GEORGE J. ENGELMANN, M.D.

*Professor of Obstetrics in the Post-Graduate School of the Missouri Medical College.*

### WM. PORTER, A.M., M.D.

*St. Louis.*

### NATHAN S. LINCOLN, M.D.

*Emeritus Professor of Surgery, Medical Department Columbia University, Washington, D. C.*

### FESSENDEN N. OTIS, M.D.

*Clinical Professor Venereal Diseases, College of Physicians and Surgeons, New York City.*

### CHARLES T. PARKES, M.D.

*Professor of Anatomy, Rush Medical College, Chicago.*

### PERCY NORCOP, M.D., F.R.C.S.

*Formerly Surgical Dresser to Professor Lister.*

### JOSEPH TABER JOHNSON, A.M., M.D.

*Professor of Obstetrics and Dis. of Women and Infants Med. Department University of Georgetown, D. C.*

### E. FLETCHER INGALS, A.M., M.D.

*Professor of Diseases of the Chest and Physical Diagnosis, Rush Medical College, Woman's Medical College, etc. Chicago, Ill.*

### A. F. ERICH, M.D.

*Professor Diseases of Women, College of Physicians and Surgeons, Baltimore.*

### THOMAS F. WOOD, M.D.

*President Medical Society of North Carolina, Wilmington, N. C.*

### JAMES M. HOLLOWAY, M.D.

*Professor of Surgery, Hospital College of Medicine, and Kentucky School of Medicine, Louisville, Ky.*

### DUNCAN EVE, M.D.

*Professor of Surgery, Medical Department University of Tennessee.*

### A. M. OWEN, M.D.

*Professor of Surgery, Evansville Medical College.*

### JOHN P. BRYSON, M.D.

*St. Louis.*

### F. J. LUTZ, A.M., M.D.

*Surgeon to Alexian Brothers' Hospital; Physician to Misericordia Asylum for the Insane and Nervous.*

### E. S. LEMOINE, M.D.

*One of the Physicians to St. Luke's Hospital, St. Louis.*

### G. A. MOSES, M.D.

*Lecturer on Clinical Gynecology, St. Louis Medical College.*

### J. B. JOHNSON, M.D.

*Professor of the Principles and Practice of Medicine, St. Louis Medical College.*

**LAMBERT & CO., Manufacturing Chemists,**  
307 LOCUST STREET, ST. LOUIS.

Listerine is sold by all Druggists on Physicians' Prescriptions.



# LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

Vol. XIV.

LOUISVILLE, AUGUST 26, 1882.

No. 9.

J. W. HOLLAND, A. M., M. D., . . . . . } Editors.  
H. A. COTTELL, M. D., . . . . . }

## MISCELLANY.

**LANGENBECK'S SUCCESSOR.**—Strange as it may appear, the chair in the Berlin University recently vacated by Langenbeck has gone a-begging. Billroth and Volkmann have both declined it, and now it stands in waiting for Professor Bergmann, of Würzburg. It remains to be seen whether Bergmann will accept the honor. Either fat professorships are plentiful in Germany, or the rising surgeons of that country distrust their ability to fill a place to which Langenbeck's brilliant achievements and great name have given such prominence.

**COOLING WATER.**—A simple contrivance for cooling water has been invented by M. Toselli, of France. It is described in *Les Mondes*, and consists of a cylindrical cup for holding any liquid, into which may be plunged an inner goblet shaped like an inverted truncated cone, and having a lid that rests upon the outer cup. Putting one hundred and fifty grams of nitrate of ammonia in the inner goblet, filling it with cold water, and stirring it so as to hasten the solution, the temperature of the outer liquid is soon reduced to at least 12° C., or 28° F. The salt may be used for an indefinite period by spreading it upon a plate after each trial and exposing it to the sun until it crystallizes anew. The inventor prepares a salt which will lower the temperature 28° C., or 50° F., in the warmest countries.

**ELEPHAS PRIMIGENIUS.**—The Paris correspondent of the London Lancet says that in turning up the earth for laying the foundations for the new general post-office, which is situated almost at the foot of Montmartre, the workmen came upon some antediluvian remains, consisting of the mammoth or the

giant elephant with a mane, to which paleontologists have given the name of "*Elephas primigenius*." It is known that with the hippopotamus and the rhinoceros the giant elephant once inhabited these parts. M. Gaudry submitted to the academy some fossilized remains of the mammoth, which he found lying deep in these grounds. It was a fragment of the humerus, which gives some idea of the enormous size of this gigantic animal. He also submitted a portion of a tooth which presented some peculiarities of tissue. M. Gaudry also stated that analogous remains were found in other parts of Paris, and on some of the plateaux in the neighborhood the remains of an elephant approaching more to the modern elephant were also found.

**PURIFICATION OF WATER.**—An English paper states that hard water may be rendered very soft and pure, rivaling distilled water, by merely boiling a two-ounce vial, say in a kettleful of water. The carbonate of lime and any impurities will be found adhering to the vial. The water boils much quicker at the same time.

**NEW METHOD OF DETECTING STONE IN THE BLADDER.**—In The Lancet of July 1st Mr. Davidson states that the attachment of a rubber auditory tube to the sound, connecting it with the ear of the surgeon, greatly facilitates the discovery of calculi.

M. GIBBONY has discovered that healthy rabbits become tuberculous if exposed for some time to air expired by animals in a consumptive state, but if the air is charged with carbolic acid the disease is not produced.

THE Sultan of Turkey has given a site in Jerusalem for the purpose of erecting a hospice and ophthalmic dispensary, under the auspices of the English branch of the Order of St. John.

**HYDROPHOBIA FROM FEAR.**—The *Gazette des Hopitaux*, June 29th, while noticing a case of alleged recovery from hydrophobia related to the Académie de Médecine, observes that it is often difficult to make the distinction between true hydrophobia, due to the absorption of the rabid virus, and the symptoms of hydrophobia, caused by fear of the disease. Was it really hydrophobia of which a woman died at the Hotel-Dieu, with what appeared to be all the symptoms of the disease? Several months before, this woman, a street vender, had been bitten by a dog as she was passing Notre Dame, and went at once and had the wound cauterized at the Hotel-Dieu. From that time she continued perfectly well until one day, when she was pushing her barrow before the Hotel-Dieu, she was recognized by one of the students, who called out to her, "Holloa! you are not dead yet then! The dog which bit your thigh was downright mad, as they found out at Alfort!" At the very instant the poor woman was seized with a violent pharyngeal spasm, and was at once taken to the Hotel-Dieu, where she died with all the symptoms of true hydrophobia, or at least of apparent hydrophobia.—*Med. Times and Gazette*.

[Query: Should the student be held for manslaughter or murder in the first degree?—Eds.]

**AN OPPORTUNITY FOR THE MUSE.**—One morning a man called on Longfellow, and, forcing his way past the servant who had opened the hall-door, burst in on the presence of the astonished author in his library. "Mr. Longfellow, you are a poet, I believe." "Well, sir, some persons have said so." "All right, Mr. Longfellow. Poet it is! Now, I've called here to see if I couldn't get you to write some poetry for me to have printed and stuck on to my medicine bottles. You see, I go round sellin' this medicine, and, if you'll do it, it'll help me immensely; and I'll just tell you right now, if you give me the poetry I'll give you a bottle of the carminative—and it's a dollar a bottle."

**BED-LINEN STAINED YELLOW BY THE PERSPIRATION.**—A correspondent of the *Med. Press and Circular* writes: I have a patient who was at one time a hard drinker. By great efforts he has been for the past two months a total abstainer. He has been taking Richardson's coated pills containing phosphorus and quinine. He came to me the other day, in a great fright, saying that his perspiration at night stains his linen

yellow. The man states that he is in thoroughly good health. Can the phosphorus be the cause? He states that there is a sulphurous smell from the perspirations.

Upon this the editor makes the following comments: We are not aware of any case in which phosphorus or quinine, either separately or combined, has produced the effects above mentioned. This yellow discoloration of the perspiration, however, has occasionally occurred spontaneously. We have not heard of any instance in which there was a sulphurous smell. It is worthy of remark that phosphorus, even in medicinal doses of a twentieth of a grain, sometimes produces jaundice.

**TOO MUCH WRITING IN PRIMARY SCHOOLS.** A correspondent of the *Journal of Education* says, "Excessive writing in the primary grade is mis-shaping the fingers of the children. Children have gone home to their parents complaining of pain, and it looks now as though the physician will soon be interested in primary school methods. Perhaps a critical survey might see sources of danger to the eyes and other parts of the body. Certainly any method, or any labor asked of a young child, which produces malformation or injures any organ of the body, ought never to be installed in a school-room as a thing to be worshipped."—*Boston Jour. of Chem.*

**A HINT TO DRUGGISTS.**—A physician who had a colored boy in his service noticed that his alcohol seemed to be rather weak, and, as he had occasion to go to the bottle from time to time, it seemed to grow weaker. He was about to complain to his apothecary for selling him such poor stuff, when it occurred to him that the colored boy might know what the matter was; so he said, suddenly, "Tom, how much water do you turn into the alcohol when you take a drink out of the bottle?" "O, sah," replied Tom, taken off his guard, "I calkerlates to leave it about as full as I find it, sah." No complaint was entered at the apothecary's.—*Lowell Cour.*

**THERAPEUTIC NOTE.**—The Nelson County (Ky.) Fair commences September 5th and continues three days. A special train will run between Louisville and Bardstown each day of the fair. Round-trip tickets, \$1.50.

WM. B. CARPENTER, M.D., F.R.S., is announced to deliver the next Lowell lecture at Boston.

**Original.****THE PRESENCE OF THE MICROCOCCUS IN THE BLOOD OF MALIGNANT MEASLES; ITS IMPORTANCE IN TREATMENT.\***

BY JOHN M. KEATING, M.D.,

*Lecturer on Diseases of Children in University of Pennsylvania; Visiting Obstetrician to the Philadelphia Hospital.*

I propose to present for your consideration this evening the report of a recent epidemic in the Children's Asylum of the Philadelphia Hospital. The ward in which the disease first exhibited itself contained children between the ages of two and three years. Some of them had been deserted by their mothers, and others had been placed there temporarily while the mothers were employed in duties about the establishment. For the most part, these children presented a fair appearance of health; they were seemingly well nourished, of good development, although probably they would have been classed as "strumous" if their large features and tendency to glandular enlargements and eczematous eruptions had received careful attention. Together with all children of this class living in asylums, they certainly presented an open field for the production of those complications which are usually such fatal attendants upon measles.

In order to save time, I shall in this paper simply narrate the history of the cases. The little patients were zealously cared for by Dr. H. E. Campbell, Resident Physician, to whom I am indebted for the record of the notes taken at each of my visits.

I shall also embody in this report the investigation undertaken by Dr. Henry F. Formad, now well known as the patient and thorough investigator of the microscopic appearance of the blood in diphtheria, associated with Dr. H. C. Wood, under the auspices of the National Board of Health. Dr. Formad examined almost daily the blood of each little patient, and together we noted the presence of micrococci in the malignant cases, and their absence in those of a mild type. A record of these examinations was kept by Dr. W. A. Edwards, Assistant Pathologist, as also the records of the post-mortem examinations, and to him I am indebted for them. We entered this study with no preconceived views. The rapidity with which this exceedingly fatal epidemic came upon

us necessitated careful study in order to attempt, if possible, to discover its cause. I have also some photographs which show well the appearance of the field in these cases.

**CASE I.**—J. F. aged two years and three months, was taken sick April 12, 1882. There had been no cases of well-defined measles in the house at that time, though it was epidemic in the city. The child had a sore throat, some cough, with fever. The throat eruption was punctated and well marked. The child died in convulsions April 15, 1882.

**Autopsy:** An ante-mortem (chicken-fat) clot was found in the right heart, extending into the pulmonary artery. There was great systemic venous engorgement. A decided staining was noticed on the cadaver, especially about the temple, which caused the remark that the disease was probably one of the exanthemata. This child had been placed upon carbonate of ammonia, quinia, and digitalis; had had bromide of potassium, hot baths, and stimulants in small quantities.\*

**CASE III.**—A G., aged sixteen months; took sick April 15, 1882. April 16th had prodromes of measles. The temperature and pulse ran as follows: 16th: P.M. 102°. 17th: A.M. 101°, P.M. 103°, pulse 180. 18th: A.M. 102°, P.M. 103°, pulse 180. 19th: A.M. 101°, P.M. 102°, pulse 160. 20th: A.M. 101°, P.M. 102°, pulse 148. 21st: A.M. 100°, P.M. 100°, pulse 180.

In this case no defined eruption appeared on the body, although there was a decided papular eruption on the uvula and anterior half arches of the throat. While showing this case to the class we noted streaks of grayish membrane in the fauces. The child had decided bronchitis, and the voice showed that the laryngeal mucous membrane was also affected. This child was not at that time very ill. There was no question in our minds at the time that it was affected severely by the measles poison; that it was in fact another malignant case. It was carefully watched, the nourishment regularly given with quinia and iron daily, as was customary in all the cases.

On the 21st the breathing was noted as peculiar (I shall describe it hereafter). An emetic was ordered of ipecac, fearing an accumulation of mucus from the bronchitis present, and also carbonate of ammonia and digitalis and hot foot-baths were given. The child's intelligence seemed good, and it will be noted that the temperature was but 100°, while the pulse was 180.

At 8 P.M. a second attack of suffocation occurred, and the child died in violent convulsions. The venous engorgement was very marked.

**Autopsy:** A G., baby, aged one year. Post-mortem examination held ten hours after death: Heart—Left side and valves all normal. Right side—A large ante-mortem clot filling the cavity of the right ventricle and extending into the auricle; a clot was also seen in the pulmonary artery. Lungs—Left, normal. Right lung—At the base of this lung the lesions of pulmonary congestion were seen, especially where the lung approximates the diaphragm. Intestines—Slightly congested and hyperemic. Mesenteric glands—Enlarged and infiltrated by simple congestion. Kid-

\*Read June 7, 1882. From advanced sheets of the Transactions of the College of Physicians, Philadelphia.

\*To save space we omit the detailed reports of cases 2, 5, 7, and 8, giving such portions of these only as bear directly upon the main point treated of in the paper. The result of the examination of the blood of the living patients, and the post mortems when made in the fatal cases, will be found in the notes accompanying this article.—Eds.

neys—Normal. Blood—Taken from the heart-cavity as soon as it was opened and examined, showed micrococci in the liquor sanguinis and in the white blood corpuscles.

CASE IV.—J. F. McH., aged twenty-three months. This child had a typical attack of measles. The case was shown to my ward class several times throughout its course, the eruption was studied carefully in all of its details, and my friend Dr. John M. Taylor obtained for me an excellent representation of the measles eruption in water colors from this case. I refer especially to these points as evidence that the epidemic was one of measles; the cases heretofore were so irregular as to leave room for doubt to those hearing a recital of their histories. The eruption was rapidly disappearing, and desquamation had set in. April 21st the bronchitis seemed to be aggravated, the respirations were 36, and expirations seemed unusually prolonged. The breathing was noisy; the heart's action was rapid, pulse 148. Suddenly, in the evening, an attack of suffocation came on, which was relieved by an inhalation of nitrite of amyl. On the morning of April 22d the heart was beating 168; the venous engorgement was very marked, the jugular veins standing out like whipcords, the respirations were from 36 to 40, but the temperature was 99°. I saw the child at this time and noted the gasping breathing, the feeble pulse, and the tumultuous action of the heart. There seemed to be capillary spasm, judging from the gasping breath, the imploring look which the child gave to all its attendants, and we at once gave an inhalation of nitrite of amyl. In a few moments it seemed relieved. The administration of carbonate of ammonia, digitalis, hot baths, etc., was rightly adhered to. The child seemed comfortable until 4:30 P. M., when it had another attack of milder character, though longer duration, and in it, finally died of convulsions. "It was observed," says Dr. Campbell in his notes, "that the convulsion was not as severe as in the previous cases."

Autopsy: J. F. McH., post mortem made twenty hours after death. Eruption not well marked. Heart—Right ventricle contained a small ante-mortem clot. This clot was in the cavity of the ventricle, and did not involve the valves, either tricuspid or pulmonary. The left side of the heart was normal in every respect; contained no clot. Lungs—Normal, with the exception of hypostatic congestion at both bases. The pulmonary and costal pleura of the left side were inflamed and adherent in some places. Trachea—Inflamed, and containing a tenacious mucous secretion. Larynx—Inflamed and hyperemic. Liver—normal. Intestines—Peyer's patches and the solitary glands infiltrated and hyperemic. Mesenteric glands—Enlarged and infiltrated, they were about the size of a grain of corn. Kidneys—Normal. Spleen—Amyloid bodies enlarged until they presented almost the appearance seen in a tubercular spleen. Blood—Taken from heart as soon as punctured. Micrococci were found in the liquor sanguinis and in the white blood corpuscles, and they were mobile. In the corpuscles they were seen in great numbers in active movement of a vibratory or whirling character, and they appeared to have devoured the white cells. No bacilli were seen.

#### CASE V.\*

\* J. McG., aged twenty-six months. Ordinary case of measles. The eruption had disappeared on or before April 15th. This little patient was the first case whose blood Dr.

CASE VI.—F. M., aged two and a half years. This case ran a course as did the others, and I will only occupy time with a description of the post-mortem appearances. Eruption well marked on mucous membrane of buccal cavity, not so on cutaneous surface. Upon laying thorax open, lungs found to be anemic, as far as arterial circulation was concerned, but dammed up with venous blood. Heart—Normal in size and weight. Right side contained a clot extending along the pulmonary artery for some distance; it was chicken fat in consistence. Left side—Normal. Spleen—Congested; weight, four ounces. Intestines—Along the small intestine could be seen a few Peyer's patches inflamed, and well outlined against the comparatively normal gut. The mesenteric glands presented a very good example of enlargement and infiltration; they looked like so many peas scattered throughout the mesentery. Liver—Normal. Kidneys—Normal. Brain—Not examined. Blood—Taken from heart cavity as soon as it was open showed micrococci in the liquor sanguinis and in the white blood corpuscles in abundance; they were not mobile. A number of zoöglea masses were seen.

CASE VII.—C. M., aged two and a half years. The eruption in the throat of this child was very well marked. A few crescentic points appeared in the temples, and the case rapidly developed malignant symptoms.†

CASE VIII.—J. W., aged eight months.‡

The following eight cases were all taken sick at once, and I shall simply give a general statement of them for the purpose of especially calling attention to the case of W. L.

J. J., aged four years; W. L., aged five years; E. C., aged three years, catarrhal bronchitis; W. W., aged three years; C. B., aged two years, catarrhal

Formad examined during life. The view of the fluid was photographed. Micrococci were found in great abundance, acting especially on the white corpuscles. The blood was examined shortly before the child's death, when the symptoms of heart-clot had been fairly established, and the case declared hopeless. Unfortunately no autopsy was allowed in this case.

† This child was taken sick on April 20th; but under a treatment consisting of hot baths, salicylic acid, and two drams of whisky every hour, begun on the third day and continued, with milk diet, till the sixth, the child improved. On the tenth day, owing to a relative increase of white corpuscles shown by microscopic examination of the blood, Fowler's solution, two drops three times a day, was given. The large doses of whisky were kept up for three or four days, and gradually diminished. The patient recovered. The result of the microscopic examination of the blood by Dr. Formad was as follows:

April 22, 1882: Blood full of micrococci (sphero-bacteria), affecting many of the white blood corpuscles; also a large quantity of these fungi free and in various forms of grouping, mostly in zoöglea masses; white blood corpuscles in increased quantity; the precipitation of fibrin excessively marked under the glass. April 24th: Micrococci present, but in diminished quantity; white blood corpuscles less affected; precipitation of fibrin less marked. April 26th: Micrococci very marked, yet principally in zoöglea masses and free in serum, but not affecting the white corpuscles, although the latter are in increased quantity; fibrin not noticeable. April 30th: Micrococci present; white blood corpuscles still in excess, but not affected by micrococci. Red blood corpuscles not readily forming rouleaux, having lost partly their bi-concavity. May 3d: Micrococci present in diminished quantity; white blood corpuscles diminishing in quantity. May 5th: Same as last. May 18th: Still some few micrococci present; the blood otherwise appears normal.

‡ The blood examined under the microscope showed micrococci in the blood corpuscles, but none free in the field. They were seen in great numbers. The post-mortem examination showed pneumonia and pleurisy with effusion.



bronchitis; J. W., aged five years; J. D., aged five years; L. K., aged five years.

Of these *eight*, seven presented severe, but nevertheless typical examples of measles, and their blood was carefully examined by Dr. Formad and found normal. The case of W. L., who was taken ill at the same time as the others, showed from the onset a malignant tendency, giving a record such as I have already described. Dr. Formad gave me the following as the result of the examination of the blood in this case, and I had frequent occasion of examining it with him myself. Let me say that as soon as the presence of micrococci was established the child was placed upon two-dram doses of whisky every hour. Quiniae et ferri citratis in citric acid, two grains every three hours, friction to the extremities, and warm baths, with milk and beef tea.

April 22d: A few micrococci seen in the field.

April 26th: Again noted.

April 30th: Micrococci still present, white corpuscles increased and marked precipitation of fibrin. *None were noted as having penetrated the corpuscles.* Those that were found were simply in the serum. This child recovered, though every indication gave a very unfavorable prognosis.

In presenting this detailed report I desire to call especial attention to the following points, viz., the microscopic examination of the blood and the constant association of micrococci with the general manifestations of malignancy (a condition already well known), and the gradual but positive amelioration of all bad symptoms by treatment, which was directed to the micrococci as the *fons et origo* of the trouble (this, I believe, for the first time exhibited).

It will be noted that the post-mortem examinations of these cases showed more or less simple pulmonary congestion, and at times simple enlargement of the glands, but usually so circumscribed as to preclude the possibility of its being the immediate, or even remote, cause of death. Again, the mode of death was peculiar: the fatal signs came on suddenly and with frightful intensity, the gasping breathing, the frantic efforts to obtain air (or really to aerate the blood), the imploring look, with consciousness not impaired, seemingly unduly acute, until the final convulsion or gradual cyanosis brought the end. The turgid veins, the occasional venous engorgement, the feeble pulse, and the fluttering heart, pointed unmistakably to but one cause—the gradually forming right-sided heart-clot; and the post-mortem appearance, as these notes show, gave us a large, tough, chicken-fat clot, obstructing the venous circulation, firmly planted in the right heart and its tributaries, which was too often exhibited to raise a question. One of the earliest symptoms of this impending danger was undue rapidity of respiration. The child seemed to be

doing well, its eruption irregular, probably incomplete, or dark and mottled, and in blotches, when attention would be called to the great rapidity of respiration with a peculiar gasping inspiration, fish-like in character. The other fatal symptoms would follow rapidly, and within twelve hours the child, despite carbonate of ammonia, warm baths, digitalis, etc., would die of heart-clot. What caused this?

In a short paper which appeared in the Amer. Jour. of the Med. Sciences for January, 1882, I gave the experience of a number of cases of diphtheria, scarlet fever, and measles, and then attributed the condition to an increase of fibrin due to the rapid tissue changes and the malignancy of the type of disease, and urged the importance of pushing an alkaline treatment from the start.

The microscope has shown here that something more is associated with this condition.

The moment that symptoms of malignancy—namely, dark eruptions, ill-defined crescents, delayed and imperfect appearance of the eruption, with feeble circulation, high temperature, and pharyngeal false membrane—appear, the examination of the blood revealed micrococci in abundance in the field. They do not simply lie as impediments to the free passage of the blood, though they most undoubtedly do this, and obstruct its passage in the capillaries, but they surround the corpuscles, they enter the white corpuscles, and there develop with surprising rapidity, and finally cause some of them to rupture, when their contents will cover the field. Still, if they alone clogged the circulation in the capillaries, caused stasis in the lung, and thereby provoked an accumulation in the already enfeebled right heart with blood having a tendency to coagulate, the cause of heart-clot alone would seem to have been explained.

We find that they develop with activity when the blood-current is retarded; hence we find them spread throughout the heart-clot itself, possibly at times having been here arrested by the obstruction to the flow caused by the lung-congestion, known as a frequent complication of these cases, and finally aiding, by a mechanical cause alone, the deposition of fibrin, that forms the clot. They do more. They act upon the white blood corpuscle, destroy it, in all probability, or, at least, as one of the cases proves conclusively, prevent its change to red corpuscles; and thus the oxygen carriers being either destroyed or reduced in numbers, with



none to replace them, the tissues retain their detritus for want of carriers to relieve them, and another factor is added to increase mortality.

Granted then that the appearance of the micrococci is coincident with symptoms of malignancy, we must assert that whether their association be *post hoc* or *propter hoc* they must have a common cause. Our treatment receives an impetus in a new direction.

I asked Dr. Formad what, in his experience, most readily checked the development of micrococci in his culture solutions obtained from erysipelas, diphtheria, etc. He answered, *Alcohol*. Dr. Campbell at once withdrew carbonate of ammonia and digitalis from the treatment for the future, and gave whisky. Five children had already died with the symptoms I have just described, and the sixth was exhibiting all the malignant symptoms, together with those which experience had taught us came from commencing heart-clot. The child had rapid gasping breathing, was becoming cyanosed, its heart was tumultuous, and the rapid pulse was growing weaker. The instructions were to give *three ounces of whisky within the next twelve hours* in frequent and small doses. The treatment was carefully carried out, and the child was saved. In this child micrococci were found in abundance in the blood, but none had penetrated the corpuscles, and for a long time the preponderance of white blood-corpuscles was noted, which continued until gradually the blood became normal under the use of *arsenic*.

Again, let me illustrate another point. In one ward there were six cases at the height of eruption. I carefully examined, with Drs. Campbell and Markoe, each case. One case was found to be of a malignant type. The child's right cheek was hardened and inflamed, and the mucous membrane showed that glistening surface so manifest in cancer oris. The breath was fetid, there were cerebral symptoms, and a grayish exudation lined the fauces. We wished to test the microscope; so, without reference to any particular case, we requested Dr. Formad to examine the blood of all. In five the blood showed no micrococci; in one a large mass appeared in the field upon the first examination, and this one was the malignant case. This child was placed at once upon large doses of whisky, and it was also given in tonic doses quiniæ et ferri citratis and citric acid. The vegetable acids have also this remarkable effect of checking the development

of micrococci in culture solutions, especially acetic acid; but the mineral acids, also carbolic acid, it is said, have no such action. The bichloride of mercury also possesses this quality to a marked degree.

Now let me, for a moment, review this subject in the light of treatment, which to us is certainly of greatest importance. We may look at present upon the micrococcus as associated with the malignant symptoms of all complications known as "blood-poisoning." It is found in erysipelas, in puerperal septicemia, in diphtheria, and in malignant measles. Experience has already taught us that alcohol, the vegetable acids, calomel, or corrosive sublimate are the drugs *per se* in septicemia. The action of alcohol and calomel is too well authenticated in puerperal septicemia to doubt their efficacy. We know of late how surprising a result will often attend the use of alcohol and corrosive sublimate in malignant diphtheria, and also the value of vegetable acids, especially lemon-juice and claret, in this dreaded disease.

My cases simply illustrate one part of the subject. In this recital I do not allude to the other death-producing complications which are so universal. Children with measles will die of cerebral complications, of pneumonia, of enteritis, and enterocolitis. With these we have nothing to do at present. Their treatment will of course depend upon the lesions. Quinine, opium, hot baths, poultices will all take part.

I have simply brought forward the subject of "blood-poisoning" for your consideration; and as these remarks are based upon the careful study of but one epidemic they can not be submitted as conclusive, but simply as illustrative of what may at some future time be accomplished by studying, not merely the bacteria anatomically and physiologically, but by experimentation with bactericides as antidotal in their action in diseases they may cause or complicate.

The conclusions which seem warranted by the statements of this paper, and by observations made in other cases in the Hospital, are as follows:

The micrococcus is found in the contents of pustules and vesicles, and also in the blood taken from the measles-papule in ordinarily mild cases, without its being present in the blood taken from the punctured finger. In severe cases, called malignant in this paper, owing to the rapid appearance of morbid symptoms, the blood shows early in the attack numerous patches of micrococcus in the field.

In cases of rapid sthenic disease with high temperature and great tissue change, the evidences of large quantities of fibrin with a tendency to coagulation are manifest. The rapid production of micrococci soon gives the mechanical impediment, and if stasis takes place from any other obstruction to the circulation, clots rapidly form.

The non-appearance of clots in malignant fevers attended with fluid blood, such as low forms of typhus, diphtheria, etc., is simply due to the fact that rapid tissue changes have resulted in decomposition, instead of into fibrin-forming substances—no fibrin is formed, hence no clots—but the micrococci are present all the same. These cases are held by some to be the malignant ones, but I think the *foudroyante* character of the others, just mentioned, entitle them to be placed in the same category. But the micrococcus, if left unheeded, may attack the white corpuscle, as distinctly seen under the microscope, and destroy its contents. The red cells also change in appearance, and finally probably become to all intents and purposes useless in the economy. When such a condition is seen by the microscope and found extensive, a fatal prognosis can be given despite the most active treatment.

In cases where the white blood cells are as yet unaffected, treatment, when active, will be followed by good results, provided the other complications, as visceral inflammation, etc., are not in themselves excessive.

Alcohol (whisky in our cases) seems in some way, when given in large amounts, to check the progress of the marauders, to arrest the process of destruction, and, if needful, can be associated with quinine and iron in small repeated doses, digitalis perhaps, and frictions, baths, poultices, etc. As we have seen, the symptoms presented are contemporary with the changes going on within the blood; they may, in lieu of a careful microscopic examination of the blood, be taken as a gauge for treatment; knowing what can and will take place, early active treatment will give the patient some chance for the future.

PHILADELPHIA.

A WHOLE family, consisting of six persons, living at Murceaux, in the Department of the Seine-et-Oise, was poisoned through eating poisonous fungi in mistake for mushrooms. Medical aid was sought, but to no avail, and all six died in great agony.—*Brit. Med. Jour.*

## Correspondence.

### JABORANDI.

*Editors Louisville Medical News:*

May you not have been too hasty and positive in heading my son's article in your journal of the 5th inst. "A Case of Fatal Poisoning from Jaborandi"? Do you think that judgment should have been rendered without the evidence of additional cases to support it? May it not have been more coincidental than causative, or, at least, as much so? I have given Tilden's fluid extract of jaborandi in several cases, but never with any thing like such effects as in the one in question. The dose labeled on the bottle is "one fourth to one dram." As the teaspoons in use through our country here often hold under than over one dram, I have always, in cases other than the one in question, ordered a teaspoonful for a dose, and the same quantity to be repeated every hour until the desired effects should be produced. I have known as much as six and eight teaspoonfuls to be thus taken without any untoward results, and it is a question in my mind whether or not the case that so unfortunately terminated fatally did not die of congestion from other causes. The patient's bed was close to a door, through which a cool breeze was blowing, and I ordered it shut. Her arms were bare, and I advised a garment with sleeves. But she was quite self-willed, and tried to get out of the bed in order to sit up in the breeze while my son and I were in her room. Now, we remained with her one hour after administering the first dose. In half an hour she began to expectorate more fluid, and freely, and the skin was moist and warm when we left. She had also just taken a short nap, for the first time, she said, in twenty-four or thirty-six hours. We left two teaspoonfuls of the fluid extract mixed with two of water, with directions that a teaspoonful of this mixture be given every hour and a half until free expectoration and perspiration should be promoted. How many doses of jaborandi she got I don't know; but she could not have taken more than three teaspoonfuls of the fluid extract at the most. I have known weak patients to take six or eight teaspoonfuls of the drug without unfavorable symptoms being observed, but have never heard of such effects as were visible in the case under consideration.

Now I am inclined to the opinion that the

patient (who was not very patient) either had the door opened and let the wind blow upon her, or got out of the bed and sat in the draft, while in a state of profuse perspiration, and thus went into a regular congestion; for when we saw her twenty-four hours later her skin and pulse were in a state precisely similar to what I have often observed in congestive fevers which terminated fatally, where of course no jaborandi had been taken. No longer than day before yesterday my son and I were called to see a colored woman at about 5 o'clock P.M. who had the night before taken Moffat's pills, and at noon while purging under their action she was seized with a chill. We found her uncovered in bed near an open door through which a cool breeze was blowing upon her. Her skin was moist and cold, her pulse 128, and her breathing hurried and labored. She was very restless, and probably would have been in fatal congestion before many more hours had nothing been done to avert it; but we closed the door, had her covered, and gave her appropriate treatment, under which a salutary reaction was soon established. Had she taken jaborandi, the collapsed state of the capillaries of the skin would probably have been attributed to the action of the drug.

One week ago today we saw a case of chronic fever presenting an inflamed state of the stomach and an engorged liver, with dropsical effusions, in which the skin was cold and clammy. No jaborandi that I am aware of had been used in this case; but we gave five drops of the fluid extract of belladonna, which promptly restored the equilibrium of the circulation. The same day we saw another case of chronic periodical spinal hyperemia, accompanied by numbness of the extremities, and in which paralysis of the facial nerve on one side had suddenly supervened. The patient's feet and hands were almost as cold and clammy as were those of the case in which jaborandi had been given. Believing that malaria was masked under these symptoms, and fearing to give quinine because the patient contended that this medicine always gave him hematuria, we administered fifteen drops of the fluid extract of gelsemium, and applied a blister over the spine. Under this treatment he was promptly relieved. Had jaborandi been previously given him, the collapsed state of the capillaries might have been ascribed to it.

I once had under my care a lady who called my attention to a very perceptible engorgement of her pancreas. I asked her if

the salivary glands were doing their duty, when she replied that her mouth had for a long time been very uncomfortably dry; whereupon I reasoned thus: If jaborandi acts so specifically upon the salivary glands in promoting a flow of saliva, why not disgorge the great abdominal salivary gland (the pancreas) by setting up free secretion in it? I therefore gave teaspoonful doses of the fluid extract every hour until there should be a profuse flow of saliva; and when I next saw her she playfully showed me a bed-sheet doubled, facetiously remarking, "This is my pocket handkerchief. I first tried a towel to catch the flow from my mouth, but I soon found nothing less than this big sheet would answer the purpose." The pancreatic tumor was relieved speedily, but no symptoms of collapsed capillaries (as in the unfortunate case) were produced, although I think she took an ounce of the drug in dram doses.

In view of the symptoms above reported, I think we must regard the cause of the collapse in the case in question as still *sub judice*.

D. W. FOSTER, M.D.

PLAISANCE, LA., August 11, 1882.

[In view of the symptoms described in Dr. Foster's case (MEDICAL NEWS, Vol. XIV, page 68), and their striking similarity to those presented by Dr. Marvin's cases, alluded to in our editorial comment, we felt justified in heading the article in question "A Case of Fatal Poisoning by Jaborandi." This title, however, was chosen under the impression that Dr. Foster himself was prepared to attribute the symptoms described in his letter to the drug, which seemed to have been given not according to his directions, the case having been taken out of his hands at a time when restorative treatment was most urgently demanded. Dr. Foster, however, did not call it a case of poisoning by jaborandi; and in so far as the title would seem to make him responsible for a theory which he does not entertain, we must apologize for placing it at the head of his article. We are willing to admit that, so far as Dr. Foster's case is concerned, the question of fatal collapse from jaborandi may be still *sub judice*; but that the drug is competent to induce this condition of the system is a statement fully borne out by clinical observation and toxicological experiment.—Eds.]

JAPAN has now six medical journals published in the native language.

*Editors Louisville Medical News:*

In your issue of the 5th inst. is reported by Dr. Cleaver, of Lebanon, a case of chronic malarial hematuria. This being a typical case of the disease is one in which the use of strychnia under the skin is indicated. This drug, standing at the head of the vaso-motor stimulants, is especially useful in low vascular tension. It should be administered in full doses that the relaxed vessels may be made so tense as to prevent exudation. By full doses is meant the amount required to produce the desired effect, i. e. to stop leakage. Therefore, if one thirtieth of a grain does not suffice, push it to one twentieth, to one fifteenth, and even to one tenth of a grain, repeating sufficiently often to secure and keep secured the physiological action of the drug.

HENRY ORENDORF, M.D.,  
Prof. Therapeut. Ky. School of Med.

LOUISVILLE, August 17, 1882.

## Reviews.

**The Change of Life in Health and Disease: A CLINICAL TREATISE ON THE DISEASES OF THE GANGLIONIC NERVOUS SYSTEM INCIDENTAL TO WOMEN AT THE DECLINE OF LIFE.** By EDWARD JOHN TILT, M.D., Past President of the Obstetrical Society of London. Fourth edition. Philadelphia: P. Blakiston, Son & Co. 1882.

That this classic work should have reached its fourth edition is not remarkable, since it is the only book extant in which the subject of diseases incident to "change of life" may be found treated in a systematic and exhaustive manner. The author refers nearly if not all the nervous aberrations attendant upon the subsidence of reproductive power in woman to derangements of the sympathetic, and, investigating the subject with this thought uppermost in his mind, he has been able to construct a work of great practical value in this department of neuro-pathology. The following quotation from his preface defines his position in this particular:

Mine is only a clinical history of ganglionic diseases, carefully studied in their rise, progress, and subsidence, at the successive critical periods of the life of woman. Having established beyond dispute that the sexual organs, or rather the ovaries, produce certain well-defined ganglionic diseases, and that some of these determine cerebro-spinal affections, I have sought to show that in all probability the same affections may sometimes be determined by other viscera. I have also attempted to prove that the central epigastric ganglion, the "cerebrum abdominale" of former writers, has definite functions and important diseases. It will be for laborers in the same field to say how far I have succeeded in the attempt.

After an introductory chapter devoted to the importance of the change of life, critical epochs, results of the change, tonic influence of the change, and finality of the crisis, the author discusses what follows under three heads. Part first considers the physiology of the change of life, part second the general pathology of the change, and part third its special pathology.

The work, though in a measure theoretical, is at the same time replete with practical information. It contains a number of tables, laboriously framed and of great statistical value, and is abundantly illustrated by cases taken from daily practice.

The directions for treatment are such as the practitioner has daily use for, and are rendered authoritative by the eminent place which the author's long and useful labors in gynecology have enabled him to reach.

Economy in space in the present edition seems to have been studied by the publishers, and they have succeeded in condensing the volume (formerly of two hundred and ninety-two) into one hundred and eighty-four pages. This of course reduces the price of the work; and while it may be found by the reader to be less elegant than the third edition, it is nevertheless presented in fine style. It may be had either in paper or cloth, the former costing but seventy-five cents, the latter \$1.25; but we doubt the wisdom of buying a book with paper covers unless the purchaser intends to have it done up immediately in some elegant and permanent style of binding. A book without a substantial binding is not ornamental, nor will it be long before the buyer will find his misplaced economy rebuked by a dilapidated mass of paper to which the most skillful binder can give neither form nor beauty.

## Books and Pamphlets.

**SOME THOUGHTS ON PHTHISIS, WITH SPECIAL REFERENCE TO THE VALUE OF LARYNGEAL SYMPTOMS IN DIAGNOSIS.** By M. F. Coomes, M.D., Louisville, Ky. Reprint.

**NOTE ON THE ESSENTIAL PSYCHIC SIGNS OF GENERAL FUNCTIONAL NEURASTHROPHIA OR NEURASTHENIA.** By C. H. Hughes, M.D., St. Louis, Mo. Reprint from the *Alienist and Neurologist* for July.

In this note the author favors the use of the term neurasthrophia for the nervous derangement generally known as neurasthenia, since the symptoms of this affection may be attributed to defective nutrition in "the higher nerve centers, especially the psychical, leading to consequences short of appreciable struc-



tural change." Since neurasthenia (or neurasthenia) is a form of nervous exhaustion culminating in insanity, "its usual ending when not arrested in its course by fortuitous circumstances in the life and surroundings of the patient, or by successful treatment," it is important that it should be recognized early in its course. The author then describes the affection briefly (making its diagnosis easy) through its characteristic psychic symptoms, some of which are never absent when the disease is present.

THE ILLUSTRATED QUARTERLY OF MEDICINE AND SURGERY. Edited by Geo. Henry Fox, Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, New York, and Frederic R. Sturgis, Professor of Venereal Diseases, Medical Department of the University of New York. Vol. I, No. 3, July, 1882. New York: E. B. Treat.

This number contains an article upon Duodenal Ulcer, by Francis W. Campbell, M.D.; A New Method of Closing Urethral Fistulae, by Chas. McBurney, M.D.; A Report of a Case of Congenital Keratoma, by Geo. G. Wheelock, M.D.; Papilloma of the Pharynx Removed and Cured, by J. O. Roe, M.D.; Gummous Iritis (two cases), by F. R. Sturgis, M.D.; Therapeutic Uses of Rubber Tubing, by William Chamberlain, M.D.; and Elastic Tension in Treatment of Pott's Disease, by M. J. Roberts, M.D. Two of these articles are illustrated by elegant colored lithographs and one by a beautiful artotype. Each of the other papers are accompanied by well-executed woodcuts.

The former numbers were noticed at length in the MEDICAL NEWS of May 20, 1882, and the object and scope of the work indicated. It is sufficient to say that the present number fully sustains the claims of those preceding it.

We hope the profession will give this journal due attention, for certainly without liberal patronage a work involving such expense as must attend the publication of the Quarterly can not be sustained.

## Formulary.

### HYPOPHOSPHITES PREPARED WITH GLYCERIN.

Dr. C. G. Polk (Virginia Med. Monthly) has been using for the past year the following preparation, which he prefers to the syrup of hypophosphites:

Ferric hypophosphite.....	gr. 128;
Manganese " .....	gr. 48;
Calcium " .....	gr. 128;
Sodium " .....	gr. 96;
Quinia " .....	gr. 64;
Strychnia " .....	gr. 2;
Sarge pure glycerin, sufficient to make one pint;	
Solution of hypophosphorous acid, sufficient to dissolve the iron.	

Dissolve the iron in one ounce of water acidulated with hypophosphorous acid; add the hypophosphite of manganese dissolved in one ounce of water, then the lime, soda, quinia, and strychnia, and the required amount of glycerin.

### MORELL M'KENZIE'S NUTRITIVE ENEMA.

After a long experience in the London Hospital, Prof. McK. concludes that the following is the best formula:

Cooked beef, mutton, or chicken....	110 parts;
Sweetbreads .....	50 "
Fat.....	20 "
Cognac.....	7 "
Water.....	75 "

These different substances, when well mixed, melt down to about two hundred and sixty grams. The meat, sweetbreads, and the fat may be passed through a very fine sieve and the whole mixed with the water, after the fashion of making a thick paste.

The enema should be administered at a temperature of 32° to 35° C. (90° to 95° F.), and it should be administered only twice in twenty-four hours.

The rectum should be washed two or three times a week with tepid water three or four hours previous to administering the nutritive enema.—*Lyon Med. J. M. F., Cin. Lancet and Clinic.*

### AGAINST MOSQUITOES.

A correspondent of the Druggists Circular, from Sheepshead Bay, a place celebrated for the size of its mosquitoes and the number of its amateur fishermen, recommends the following as a very good mixture for anointing the face and hands while fishing:

Oil of tar.....	} aa 3 j;
Olive oil.....	
Oil of pennyroyal.....	} aa 3 ss;
Spirit of camphor.....	
Glycerin.....	} 5 ij.
Carbolic acid.....	

Mix. Shake well before using.

### ALUM FOR LEAD COLIC.

Dr. Geo. C. Pitzer says: This is an excellent remedy in lead colic:

Alum.....	3 ij;
Dilute phosphoric acid.....	3 j;
Orange-flower water.....	} aa 3 ij.
Water.....	

M. S. One tablespoonful every hour.

This will frequently relieve the nausea, relax the spasm, and open the bowels when other drugs fail to afford any relief.—*Amer. Med. Jour.*

### HYPODERMIC INJECTION OF CAFFEIN.

The Lancet says that, owing to its very slight solubility in water, caffein has not hitherto been used hypodermically. M. Tanret has discovered that caffein dissolves readily in solutions of benzoate, cinamate, and salicylate of soda, the double salts being thus formed. Salicylic acid yields the salt most soluble in water. M. Dujardin-Beaumetz has employed these solutions hypodermically, and has ascertained that they do not irritate. Solutions for administration by the mouth may also be readily obtained in this manner.—*Med. and Surg. Reporter.*

### TEROTOMICIDE.

For the destruction of moths, and to prevent their ravages in woolen clothing, Stearns recommends a combination of Persian insect-powder with Borneo camphor and the shavings of true red cedar.



## Selections.

**Uterine Hemostatics.**—By J. Braxton Hicks, M.D., F.R.S., etc., Obstetric Physician at Guy's Hospital, and Lecturer on Obstetrics, etc.:

As a small contribution to the practical portion of the subject of uterine hemostatics, I venture to make a few remarks on the mechanical kinds, which we know by the name of plugs or tents. In doing so I must be understood to refer only to those cases where the cavity of the uterus is not sufficiently large to contain blood in quantity, the loss of which from the circulation is likely to produce any thing of serious detriment.

If we go back to former practice and to textbooks we find it recommended that in case of threatened abortion with much hemorrhage, a vaginal plug should be used. The vaginal plugs recommended are the tampon, cotton or wool, silk or cambric handkerchief, rags, or sponges passed in till the vagina is filled up. An India-rubber ball also has been suggested, covered with felt or such like material. Now, even with the best management there is much of distress to the patient in the use of the vaginal plug; and with regard to its hemostatic effect very much of uncertainty, and generally partial failure; and in the hands of the unskillful and careless there is positively no restraint of bleeding worth the mention. If at any time any good results be produced, it is rather by the reflex irritation that it causes, whereby the uterus expels its contents. It is not so very rare an occurrence that one finds, on removal of the plug, the ovum on the uppermost part of it. But besides its palpable inefficiency, a vaginal plug, being of a porous texture, absorbs a large quantity of blood and thus conceals it from our sight; it also favors decomposition, and this, as is well known, occurs within a few hours; and thus we have a new element of danger.

Again, in many cases, when called to such a case, we have no speculum at hand; and although we may extemporize one out of card-board, book-covers, or such like material, yet, before we have thoroughly and firmly filled the vagina we must have given the patient considerable pain and distress, besides having occasion to put such pressure on the urethra as may necessitate subsequent catheterism. For these reasons, namely, the imperfection of action, pain in introduction, and danger if left in long—in other words, its general crudity, it seems to me that as a general rule the vaginal plug should, in the cases I have supposed, be discarded. And as a substitute I would urge the employment of the cervical plug as being more precise in action, as well as being capable, if we use a dilating kind, of expanding the canal for the purpose of exploration, or for the expulsion or removal of its contents.

If, then, in any case of uterine hemorrhage where we have the conditions above alluded to, we desire, besides immediately checking the bleeding, to dilate, we can use the compressed sponge-tent; the best form of which I have found to be those made after Sir James Simpson's plan, by Duncan, Flockhart & Co., of Edinburgh. These can be introduced by a long pair of forceps, and retained *in situ* by placing a piece of sponge, with tape attached, in the upper vagina. Of course, even these materials retain some secretions, etc. and tend to facilitate decomposition; but their removal and cleansing can be effected

much more readily than the vaginal plug, because it requires but a small portion. The sea-tangle tent, by reason of its slipperiness, is unreliable as a plug in hemorrhage. If we desire, however, only to plug the cervix, we can very easily extemporize a plug from materials to be found in every house. For instance, take a stick (say a flower stick) about a foot long, and taper it at one end to about the size of an uterine sound, or rather larger; wind round this end, for about three inches down, strips of cambric rag, lint, or sponge to the required thickness, judging from the size of the os. Strips of sponge can be readily obtained from cup-shaped sponges of compact texture, and they can be tied on by thread, layer after layer, till the requisite conical form is obtained. The strips of the other material can be laid on similarly. After the covered end has been well greased it is passed into the canal and the stick retained *in situ*, after the manner in which we tie in a catheter; an elastic tape, if obtainable, is to be preferred.

A catheter or bougi, or the end of the long injection-tube, can be treated in the same way. If we require great precision of application, then it is best that the hand should hold the external end till the hemorrhage has ceased. If the catheter and stilet be used, then I have found it convenient to bend the external portion backward, between the buttocks, tying the tape round the ring of the stilet—the ends of the tape being carried, as usual, to back and front of the waist-band.

These more homely adaptations I have recommended, rather than the especially made kinds, because they are often wanted at times when we can not send home for a more showy sort. In any case, a cervical plug, expanding or not, is more precise, less crude and painful in application, than the vaginal, and, in my experience, nearly always successful. In all cases of abortion, where a plug is necessary, I would lay it down as a rule that the expanding tent should be employed. In cases of flexion with abortion (and it is this complication which so frequently increases the hemorrhage) it will be found that the covered stick or stemmed plug above described is very useful; for, if the fundus be elevated during its introduction, the uterine cavity is straightened and evacuation of the contents thereby facilitated.—*Brit. Med. Journal.*

**Uremic Convulsions and Coma Successfully Treated by Hypodermic Injections of Pilocarpin, Chloral, and Benzoic Acid.**—The patient, a boy of twelve, was suffering from acute nephritis, urine so scanty as almost to approach complete suppression, deeply tinged with blood, and highly albuminous. The treatment adopted at the outset consisted of a brisk purge of compound jalap powder, leeches to the lumbar region, warm blanket bath, and mild diuretic mixture. For two days the case progressed fairly well, but on the early morning of the third day, being hastily summoned, I found my patient in convulsions, perfectly unconscious, pupils dilated and insensible to light. At this juncture the treatment resorted to was the hypodermic injection of a third of a grain of the nitrate of pilocarpin and an enema of chloral hydrate. Copious perspiration was thus produced; the convulsions continued, however, as frequent but not so severe. On the forenoon of the following day the pilocarpin was repeated, likewise the chloral; similar diaphoretic effects resulting, with decided abatement of the convulsions. With considerable difficulty I now managed to give a dose

of jalapine. As soon as the ability to swallow returned, benzoic acid in two-grain doses was administered every hour, and the strength supported by small enemata of beef tea, to some of which was added a little brandy. From the time the power of swallowing returned benzoic acid was the only remedy used, and its use was continued for six days. It was given as above for the first forty-eight hours of that period and after that in five-grain doses every three hours. During these six days the patient, though free from convulsions and able to swallow, lay in a semi-conscious state, requiring to be spoken to loudly and shaken to get him to take any thing. His vision was completely lost. He knew no one, could see nothing held up before him, not even a bright light, pupils still continuing slightly dilated. Under the steady use of the acid the urine increased in quantity, grew lighter in color, and the albumen lessened daily. His mind became clear and vision once more distinct, convalescence being gradually established.

Whether the theory regarding carbonate of ammonia circulating in the blood being the cause of uremia be correct or not (and the recent experiments of Oppler and Zalesky seem to indicate that it is not), this is the second time within my own limited experience of such cases in which benzoic acid has done good service. Whether its mode of action be the conversion of the poisonous alkali into a harmless acid and salt, or in what other specific way it acts, I am not prepared to say, but the above is strictly in accordance with facts.—*W. Brown Moir, M.D., in Lond. Lancet.*

**The Scientific Principles of Inhalation.**—By Robert J. Lee, M.D., F.R.C.P., Senior Assistant Physician to the Hospital for Children, etc.:

The important relation recently shown to exist between septic agents diffused in the atmosphere and certain forms of pulmonary disease is receiving so much attention that it is well to consider the scientific principles on which it depends. Experiments show that it is possible to diffuse antiseptic agents in the atmosphere by evaporation, and that organic substances may be preserved in such atmosphere without decomposition; or, in other words, that the air may be treated as a fluid, and be charged with antiseptics which prevent bacterial development. Now, when we burn any of the hydrocarbons or gum-resins, we do not volatilize them, and the air is not rendered antiseptic, except to the extent that a certain amount escapes unburnt and is diffused. It follows from this that destruction of the antiseptic agent must be avoided. After numerous experiments—and the general results of those made a few years ago were presented at the Cambridge meeting of our Association—it appears that carbolic acid is the only antiseptic, as far as I know, which can be volatilized in a definite and constant manner. This is a most important fact in treatment, and deserving attention. If a solution of one part of carbolic acid in eighty of water be distilled under slight pressure, the vapor will contain the same proportion of the acid as the solution during the process of boiling; so that we can obtain vapor of any strength, and diffuse it in the atmosphere. Other antiseptics are either more or less volatile; as, for example, thymol, which comes off very rapidly from the boiling water, as does also benzoic acid; so that they are not convenient for inhaling.

It is also necessary to observe that vaporizing a solution in the form of spray does not volatilize the antiseptic to any great extent, since the dew settles quickly on the nearest surfaces, and does not rise and diffuse itself as the vapor of steam does.

Again, the sprinkling of solutions on clothes does not necessarily secure diffusion of the agent, for at the ordinary temperature the agent may not evaporate, but will remain in the texture of the cloth. There are other details which will occur to those who reflect on these matters, and will secure such success as may fairly be expected from the scientific use of atmospheric disinfectants.—*British Med. Journal, June 24.*

**A Case of Poisoning by Brucia.**—Thos. S. Sozinsky, M.D., communicates to the Philadelphia Med. and Surg. Reporter the following:

I was called in haste the other day to see a vigorous, middle-aged man who was suffering from the effects of an excessive dose of medicine taken two hours before, after a meal, prescribed for backache by an old, irregular, occasional practitioner, who claimed to have been at one time a surgeon in the Prussian army. I found the patient with dread pictured in his face, holding by the arms of the chair in which he sat, afraid to move or be touched lest he should fall into convulsions. He had decided symptoms of poisoning by brucia, which are essentially similar to those by strychnia. An emetic was given, and after repeated doses of chloral, an anti-spasmodic which is thought to be a physiological antidote. Two fifths of a grain of morphia was given hypodermically. In five hours from the taking of the dose (two grains) the convulsive state had largely disappeared. The prescriber claimed that his prescription was copied from a German hand-book of popular medicine (published in 1840), and that only a medium dose, according to the book, had been ordered, which I found to be the case. Twelve grains of brucia and half a dram of conserve of roses, to be made into twenty-four pills, four of which were to be taken twice a day, constituted the prescription. An ounce of ointment, containing twenty grains of veratria, was also ordered.

The proper dose of brucia is not explicitly stated in most of the books. It is placed at not more than half a grain to begin with, by some. It would seem that, as met with, it is an article of very variable constitution.

A moral: The ignorant use of powerful medicines by any one is a bad business.

**Surgical Treatment of Granular Ophthalmia.** The treatment of granular lids is partly medical, partly surgical. M. Brachet, in a paper devoted to the surgical treatment of this disease, records the practice pursued by M. Galezowski in Paris, which appears to have been successful. It consists in the excision, in each eye separately, and after the lapse of about a week, of a large fold of conjunctiva from the upper and lower sinus or cul de sac. Considerable swelling follows the operation, but as soon as this has subsided—that is, after the lapse of about four days—he applies a crayon of mitigated nitrate of silver to the inner surface of the lids. As a result of this treatment, pain diminishes, the cornea becomes clear, and vision is greatly improved.—*Recueil d'Ophthalmol.; Lond. Pract.*

# HARTER'S IRON TONIC.

**FORMULA.** Each dram of this preparation contains 1 grain of Iron, 2 grains Calasaya Bark, 1-200 grain Phosphorus, 1 grain Coca, 1 grain Viburnum, with a sufficient quantity of vegetable aromatics, Cologne Spirits, Sugar and Distilled Water.

HARTER'S IRON TONIC is a combination of Phosphorus, Calasaya Bark, Protoxide of Iron, Erythroxyton Coca, and Viburnum, associated with the vegetable aromatics in a pleasant and agreeable form, which has been so long a desideratum with the medical profession. It is pleasant and agreeable to the taste, having none of the inky flavors so peculiar to other preparations of Iron. In a low state of the system it will be found particularly efficacious. Iron restores color to the blood, and the Calasaya gives a natural healthful tone to the digestive organs. Phosphorus is a mild stimulant to the brain and nervous system, with especial action on the kidneys, bladder, and organs of generation, both in the male and female. The Erythroxyton Coca is a powerful nervous stimulant, through which property it retards waste of tissue, increases muscular strength and endurance, and removes fatigue and languor due to prolonged physical or mental effort.

The Iron Tonic acts on the stomach and liver, increasing the appetite, assisting digestion, building up the weak, frail, and broken down system, thereby making it applicable for dyspepsia in its various forms; loss of appetite, headache, insomnia, general debility, female diseases, want of vitality, nervous prostration or exhaustion, convalescence from fevers. It prevents impoverishment of the blood; is valuable in anæmia, chlorosis, etc.

The curative properties of Iron Tonic is largely attributed to its stimulant tonic and nutritive qualities whereby the various organic functions are recruited. Its action is immediate, produces at once a feeling of buoyancy to the intellect, removing depression or melancholy, and hence it is of great value in the treatment of mental and nervous affections. From its admirable composition, its use is indicated in a wide range of diseases.

The Iron Tonic contains blood-making, force-generating, and life-sustaining properties, pre-eminently calculated to support the system under the exhausting and wasting process of disease, fevers, and other acute diseases, and to rebuild and recruit the tissues and forces, whether lost in the destructive march of such affections or induced by overwork, general debility in the most tedious forms of chronic diseases. It is friendly and helpful to the most delicate stomach. Does not cause nausea, constipation, or disarrange the digestive organs. Can be taken with impunity by the most delicate lady, infant, the aged or infirm, as by the sedentary student, whose system has suffered from over taxation of the brain; and where there is a fair remnant to build on, will reconstruct the most shattered and enfeebled constitution.

It vitalizes the whole system; imparts tone, brain power, and nervous force. As a nerve power it is par excellence, a valuable ferruginous preparation, which in all respects merits the preference of the medical profession. Is valuable in all maladies caused by the impoverishment or deterioration of the blood. The blood of chlorotic women contains less of the globules than is the case in well women. Under the use of chalybeates the blood usually recovers quickly to the curor and globules which it had lost. The Iron Tonic given to chlorotic patients seems to have two methods of action, distinct, but equally necessary. First, it acts as a tonic and direct excitant of the stomach, as a special modifier of the peptic sense. Second, a part of the iron is dissolved in the gastric juice and absorbed, coming directly in contact with the inner coats of the vessels; while, by virtue of an action, which is dynamic or vital, the Iron Tonic by slow degrees places the impaired functions upon a normal footing. It is the combination of these two actions that reconstructs the blood globules, and finally cures chlorosis.

In the multitudinous nervous affections, complete loss of appetite and constipation, particularly in cases of delicate females, when the stomach is irritated, and the food inadequate to nourish and invigorate the drooping strength, and suffering from great nervous depression, it is a reliable preparation, and supplies a want as an invigorator and nutritive food tonic much desired by the profession.

MANUFACTURED BY

**HARTER & CO.,**

Practical and Analytical Chemists, ST. LOUIS, MO.

Harter's Iron Tonic is for sale by all Druggists on Physicians' Prescriptions.

# FORTY-SIXTH ANNUAL ANNOUNCEMENT

OF THE

# UNIVERSITY OF LOUISVILLE,

SESSION OF 1882 AND 1883.

## FACULTY.

J. M. BODINE, M.D., DEAN.....	Professor of Anatomy and Diseases of the Eye and Ear.
LUNSFORD P. YANDELL, M.D.....	Professor of Principles and Practice of Medicine and Clinical Medicine.
E. R. PALMER, M.D.....	Professor of Physiology and Clinical Diseases of the Chest.
T. S. BELL, M.D.....	Professor of State Medicine and Sanitary Science.
JAMES W. HOLLAND, A.M., M.D.....	Professor of Pathology, Clin. Medicine, and Diseases of the Nervous System.
DAVID W. YANDELL, M.D.....	Professor of Surgery and Clinical Surgery.
THEOPHILUS PARVIN, M.D., LL.D.....	Professor of Obstetrics and Medical and Surgical Diseases of Women.
W. O. ROBERTS, M.D.....	Professor of Surgical Pathology and Operative Surgery.
JOHN A. OSTERLONY, A.M., M.D.....	Professor of Materia Medica, Therapeutics, and Clinical Medicine.
H. A. COTTELL, M.D.....	Lecturer on Medical Chemistry.
W. CHEATHAM, M.D.....	Clinical Lecturer on Diseases of Eye, Ear, and Throat.
L. S. McMURTRY, A.M., M.D., AND R. B. GILBERT, M.D.....	Demonstrators of Anatomy.

**F E E S.**—Professors' Ticket, \$75.00; Matriculation Ticket, \$5.00; Practical Anatomy, \$10.00; Graduation, \$30.00 Hospital Ticket (required by the City), \$5.00.

## SPECIAL AND OPTIONAL MANIPULATIVE COURSES.

H. A. COTTELL, M.D.....	Demonstrator of Microscopy.
B. BUCKLE, M.D.....	Demonstrator of Operative Midwifery.
W. CHEATHAM, M.D.....	Demonstrator of Ophthalmoscopy, Laryngoscopy, and Otoscopy.
L. S. McMURTRY, A.M., M.D.....	Demonstrator of Surgical Dressings.

The Spring Session of 1883 will open March 5th, and will continue until June 1st. It includes Clinical Teaching and Pharmaceutical work in the Dispensary, systematic recitations from Text-books, by a corps of examiners who have the use of the Museum for illustration, personal manipulations in Operative Surgery, Chemistry, Histology, Ophthalmoscopy, Laryngoscopy, and Otoscopy, under the supervision of Demonstrators.

The Spring Course is designed to be supplementary to the Regular Winter Course. Attendance upon it is voluntary, and does not count as a session.

The Fee for the Full Course is TWENTY-FIVE DOLLARS.

The Forty-Sixth regular Annual Session will commence on October 2, 1882, and will continue until March 1, 1883. Previous to this there will be a preliminary course of lectures free to all students, opening September 4th, and lasting until the beginning of the regular term.

The continued success of the practical exercises in Laboratories especially fitted with Beck's Microscopes, sets of Chemical Reagents, Manikins, Ophthalmoscopes, Laryngoscopes, etc., etc., has confirmed the wisdom of the Faculty in instituting these courses. Every facility and all needful apparatus will be furnished so as to make these teachings of permanent value to the student.

*These special courses are optional. And it is recommended that first-course students should take Microscopy, for which a fee of \$5 will be charged, and second-course students the three other courses, for which a fee of \$10 will be charged.*

It is urged upon all who seek to train their senses to the requisite degree of skill to make good diagnosticians and operators that at least one course of each of the manipulative branches be taken before applying for the degree.

## CLINICAL MEDICINE AND SURGERY.

It is the determination alike of the Faculty and Trustees to secure to students that kind of information which will be most useful to them in active professional life, and it will be seen that no effort has been spared to make the University essentially a *practical and demonstrative* school.

THE UNIVERSITY DISPENSARY, which is the property of the Faculty, affords great facilities to students. The building is upon the University grounds, and is open to patients and students throughout the year. It is the oldest institution of the kind in Louisville. It has obtained the confidence of the sick poor of the city, and its clinics are daily crowded with patients illustrating all varieties of disease. The advantages accruing to the University students from this source are among the chief attractions of the institution, giving them opportunities for attending cases and witnessing diseases in every phase. The Dispensary furnishes material for DAILY COLLEGE CLINICS from the following chairs: Clinical Medicine, Clinical Surgery, Diseases of Women and Children, Diseases of the Heart and Lungs, and Diseases of the Eye and Ear, Diseases of the Skin, and Diseases of the Nervous System.

In addition to the daily College Clinics mentioned, two Medical and two Surgical Clinics will be held weekly in the commodious amphitheater of the CITY HOSPITAL.

The Professors of Clinical Medicine and Clinical Surgery will lecture in the Hospital during the session. In addition to the above, the abundant clinical material of SS. MARY AND ELIZABETH HOSPITAL is at the command of the University Faculty.

## FREQUENT EXAMINATIONS.

Universal experience has demonstrated the paramount importance of this mode of instruction as supplemental to lectures, and the Faculty has made a special provision for it. The wisdom of this action has been abundantly shown. The Faculty therefore devote additional hours for the purpose of a general "quiz," to be conducted by themselves.

Good boarding can be procured in the vicinity of the College at from \$3.00 to \$5.00 per week, fire and light included. Students on their arrival in the city by proceeding to the University, on corner of Eighth and Chestnut Streets, within three squares of the Louisville and Nashville Railroad Depot, will find the Janitor, who will conduct them to suitable boarding-houses.

A Post-graduate Course has been organized by the Faculty, which will follow immediately upon the winter session and continue six weeks. Special instruction will be offered to practitioners in various departments of medicine and surgery.

Address,

J. M. BODINE, M.D.,

Dean of the Faculty, Louisville, Ky.



TO THE MEDICAL PROFESSION.

# CELERINA

## THE NERVE-TONIC

**FORMULA.**—CELERINA is the isolated, active nerve-toning principle of Celery, Coca and Viburnum, combined in a pleasant fluid form.

**DOSE.**—One or two teaspoonfuls three or more times a day, as indicated.

Each fluid drachm represents three and one-half grains each—Celery, Coca, and Viburnum, combined with Aromatics.

**CELERINA** is the Nerve Tonic *sans pariel*. It refreshes the tired brain, and imparts tone and vigor to the entire nervous system; therefore, it is of the utmost value in Nervous Exhaustion, Sexual Debility, Paralysis, Dysmenorrhœa, Spermatorrhœa, Hysteria, Chorea, Weakness of old age, and all LAZING conditions of the system.

**TO PHYSICIANS.**—I will take pleasure in forwarding you free a sample bottle sufficient to test fully its merits. A trial only is sufficient to establish its medicinal value.

### J. H. McINTYRE, M.D.,

Surgeon in charge of the St. Louis Free Dispensary, St. Louis, Mo.

As a Nerve-Tonic CELERINA has few equals and no superior.

### D. F. POWELL, M.D.,

La Crosse, Wis.

I believe that CELERINA is the best Nerve-Tonic in use. In one case (in which no other remedy was of benefit) a cure was effected. My patient was grateful—so am I.

### L. CH. BOISLINIERE, M.D., LL.D.,

Professor Obstetrics and Diseases of Women, St. Louis Medical College.

After giving CELERINA a fair trial I have found that, as a Nerve-Tonic and Vital Reconstructor, it is what it claims to be.

### GEO. C. PITZER, M.D.,

Professor Practice of Medicine, American Medical College, St. Louis, Mo.

I have prescribed CELERINA in cases of weak, tired and nervous men and women, with satisfaction. It is a powerful and refreshing tonic, acting in its effects.

### D. R. BROWER, M.D.,

Editor Chicago Medical Examiner, and Professor Nervous and Mental Diseases, etc., Woman's Medical College.

I have used CELERINA in several cases of nervous exhaustion with good results. It contains celery, coca, viburnum, excellent drugs that are often indicated in such cases.

### C. H. HUGHES, M.D.,

Lecturer on Psychiatry and Neurology, Post-Graduate Faculty, St. Louis Medical College, Editor of Alienist and Neurologist, etc.

I frequently prescribe CELERINA when I want to use a reliable compound of celery and coca, and the prescription has given me satisfaction in its results as a Nerve-Tonic in many cases.

### C. C. FORBES, M.D.,

Visiting Physician to Female, Medical and Obstetrical, Department of Louisville City Hospital; late Medical Superintendent of Central Kentucky Lunatic Asylum, Anchorage, Ky.

The formula of Richardson's CELERINA challenges the confidence fully of any one acquainted with its constituents. I have had occasion to prescribe it in numerous cases, and have found it to justify my expectations to a highly satisfactory degree. In nervous debility, or nervous exhaustion, especially from protracted overwork—in short, for almost any form of neurasthenia, it seems to me an invaluable remedy.

### R. DARRINGTON, M.D.,

Kington, Mass.

I have obtained the most satisfactory results from the use of CELERINA in my practice. I have never prescribed a preparation to which I am more indebted.

### JAY OWENS, M.D.,

St. Paul, Minn.

I am having good results from CELERINA in weakness of the generative organs in males, and also find it an excellent general Nerve-Tonic.

### P. H. CRONIN, M.D.,

Surgeon, Department of Throat and Lungs, St. Louis Free Dispensary.

Having thoroughly tested the merits of CELERINA both in chemical and private practice, I take pleasure in stating that it is superior to any remedy of its class.

### E. FLETCHER INGALLS, M.D.,

Professor Physiology, Hygiene and Clinical Medicine, Medical College of Indiana, Indianapolis, Ind.

I have been using CELERINA in nervous diseases, particularly functional diseases of the heart, for some time, and I am satisfied that as now prepared it is a useful remedy.

### N. F. DONALDSON, M.D.,

North Platte, Neb.

I have extensively prescribed CELERINA for spermatorrhœa, impotency, and other diseases of the male sexual organs, and it has never failed in doing more than all other remedies. I cheerfully recommend it to the profession.

### H. A. COTTELL, M.D.,

Demonstrator of Anatomy, Microscopy and Medical Chemistry, University of Louisville, Medical Department.

CELERINA is a combination of drugs which meets all the requirements of a first-class prescription: it is efficient, agreeable and safe. I have used it in two cases of neurasthenia with highly satisfactory results, and shall give it still further trial.

### CHAS. ZOLLER, M.D.,

Litchfield, Ill.

I have used CELERINA in two cases of mental depression caused by sexual exhaustion, and have found the results very satisfactory. I can give the same favorable result in two cases of "Opium Habit."

### C. H. MULLEN, M.D.,

Chief, Tenn.

I have fully tested the merits of CELERINA, having used some 36 bottles in my practice, in cases of nervous prostration and general debility. It has met every indication of a Nerve-Tonic. I must say I am highly pleased with it.

PREPARED ONLY BY

J. C. RICHARDSON, Chemist, ST. LOUIS, MO.

Celerina is prepared for the use of Physicians only, and can be had from all reputable Druggists, wholesale and retail, in the United States, or from

RICHARDSON & CO., Wholesale Druggists, 710 North Main St., ST. LOUIS, MO.



TAKE ONLY AND INSIST ON "THE BEST OF AMERICAN MANUFACTURE."



## PLANTEN'S CAPSULES\*

Known as Reliable nearly Fifty Years.

\*See note page 64, Prof. VAN BUREN AND KEYES on Urinary Organs.

PREMIUM FOR "GENERAL EXCELLENCE IN MANUFACTURE."



H. PLANTEN & SON, 224 WILLIAM ST., NEW YORK.

SOFT and HARD **CAPSULES** Filled, all Descriptions

### EMPTY CAPSULES,

N. B.—All kinds of Capsules for mechanical purposes made to order, of any size.

New articles and private formulas a specialty.

Sold by ALL druggists.

SAMPLES FREE.



No. 00, Largest. No. 5 X, Smallest.

(Order by Number only.)

Boxes 100 each.

For taking medicines free of taste, smell, injury to the teeth, mouth, or throat. 100 (by mail), 50 cents.

**RECTAL SUPPOSITORY** (three sizes) CAPSULES. Box of 100 by mail, 50 cts.

**HORSE CAPSULES** (two sizes), ounce and half ounce. Box of 10 Capsules, 50 cts.

**VAGINAL CAPSULES.**

Capacity 10, 5, 3, 2, 1,  $\frac{1}{2}$ , and  $\frac{1}{4}$  Gr. Direct orders solicited.

SPECIFY PLANTEN'S CAPSULES ON ALL ORDERS. WE EMPLOY NO AGENTS OR TRAVELLERS.

## JOHN P MORTON & CO.

PRINTERS, BINDERS,

## PUBLISHERS AND BOOKSELLERS,

DEALERS IN

SCHOOL, LAW, MEDICAL, GIFT, TOY, AND  
MISCELLANEOUS

## BOOKS

## FOREIGN AND DOMESTIC STATIONERY.

440 TO 446 WEST MAIN ST.,

## LOUISVILLE, KY.





# MALTINE.

MALTINE is a concentrated extract of malted Barley, Wheat and Oats. In its preparation the temperature does not exceed 150 deg. Fahr., thereby retaining all the nutritive and digestive agents unimpaired. Extracts of Malt are made from Barley alone, by the German process, which directs that the mash be heated to 212 deg. Fahr., thereby coagulating the Albuminoids and almost wholly destroying the starch digestive principle, Diastase.

## LIST OF MALTINE PREPARATIONS.

**MALTINE** (Plain).  
**MALTINE** with Hops.  
**MALTINE** with Alteratives.  
**MALTINE** with Beef and Iron.  
**MALTINE** with Cod Liver Oil.  
**MALTINE** with Cod Liver Oil and Pancreatine.  
**MALTINE** with Hypophosphites.  
**MALTINE** with Phosphorus Comp.  
**MALTINE** with Peptones.

**MALTINE** with Pepsin and Pancreatine.  
**MALTINE** with Phosphates.  
**MALTINE** with Phosphates Iron and Quinia.  
**MALTINE** with Phosphates Iron, Quinia & Strych.  
**MALTINE** Ferrated.  
**MALTINE WINE.**  
**MALTINE WINE** with Pepsin and Pancreatine.  
**MALTO-YERBINE.**  
**MALTO-VIBURNIN.**

## MEDICAL ENDORSEMENTS.

We append, by permission, a few names of the many prominent Members of the Medical Profession who are prescribing our Maltine Preparations:

**J. K. BAUDUY, M. D.,** St. Louis, Mo., Physician to St. Vincent's Insane Asylum, and Prof. Nervous Diseases and Clinical Medicine, Missouri Medical College.

**WM. PORTER, A. M., M. D.,** St. Louis, Mo.

**E. S. DUNSTER, M. D.,** Ann Harbor, Mich., Prof. Obs. and Dis. Women and Children University and in Dartmouth College.

**THOMAS H. ANDREWS, M. D.,** Philadelphia, Pa., Demonstrator of Anatomy, Jefferson Medical College.

**B. F. HANDEL, M. D.,** Philadelphia, Pa., Supt. Hospital of the University of Penn.

**F. R. PALMER, M. D.,** Louisville, Ky., Prof. of Physiology and Personal Diagnosis, University of Louisville.

**HUNTER McGUIRE, M. D.,** Richmond, Va., Prof. of Surgery, Med. Col. of Virginia.

**F. A. HARDEN, M. D.,** Milwaukee, Wis., Supt. and Physician, Milwaukee County Hospital.

**L. P. YANDELL, M. D.,** Louisville, Ky., Prof. of Clinical Medicine and Diseases of Children, University, Louisville.

**JOHN. A. LARRABEE, M. D.,** Louisville, Ky., Prof. of Materia Medica and Therapeutics, and Clinical Lecturer on Diseases of Children in the Hospital College of Medicine.

**R. OGDEN DOREMUS, M. D., LL.D.,** New York, Prof. of Chemistry and Toxicology, Bellevue Hospital Medical College; Prof. of Chemistry and Physics, College of the City of New York.

**WALTER S. HAINES, M. D.,** Chicago, Ill., Professor of Chemistry and Toxicology, Rush Medical College, Chicago.

**E. F. INGALLS, A. M., M. D.,** Chicago, Ill., Clinical Professor of Diseases of Chest and Throat, Woman's Medical College.

**A. A. NEUNIER, M. D.,** Montreal, Canada, Prof. Victoria University.

**H. F. BIGGAR, M. D.,** Prof. of Surgical and Medical Diseases of Women, Homoeopathic Hospital College, Cleveland, Ohio.

**DR. DOBELL,** London, England, Consulting Physician to Royal Hospital for Diseases of the Chest.

**DR. T. F. GRINDSDALE,** Liverpool, England, Consulting Physician, Ladies' Charity and Lying-in-Hospital.

**WM. ROBERTS, M.D., F.R.C.P., F.R.S.,** Manchester, England, Prof. of Clinical Medicine, Owens' College School of Medicine; Physician Manchester Royal Infirmary and Lunatic Hospital.

**J. C. THOROWGOOD, M.D., F.R.C.P.,** London, England, Physician City of London Hospital for Chest Diseases; Physician West London Hospital.

**W. C. PLAYFAIR, M.D., F.R.C.P.,** London, England, Prof. of Obstetric Medicine in King's College, and Physician for the Diseases of Women and Children to King's College Hospital.

**W. H. WALSHÉ, M. D., F.R.C.P.,** Brompton, England, Consulting Physician Consumption Hospital, Brompton, and to the University College Hospital.

**A. WYNN WILLIAMS, M.D., M.R.C.S.,** London, England, Physician Samaritan Free Hospital for Diseases of Women and Children.

**A. C. MACRAE, M.D.,** Calcutta, Ind., Dep. Insp.-Gen. Hosp. Ind. Service, late Pres. Surg., Calcutta.

**EDWARD SHOPPEE, M.D., LL.D., M.R.C.S.,** London, England.

**LENNOX BROWN, F.R.C.S.,** London, Eng., Senior Surgeon, Central Throat and Ear Hospital.

**J. CARRICK MURRAY, M. D.,** Newcastle-on-Tyne, England, Physician to the N. C. H. for Diseases of Chest.

**J. A. GRANT, M.D., F.R.C.S.,** Ottawa, Canada.

**MALTINE** is prescribed by the most eminent members of the Medical Profession in the United States, Great Britain, India, China and the English Colonies, and is largely used at the principal Hospitals in preference to any of the Extracts of Malt.

We will forward gratuitously a 1-lb. bottle of any of the above preparations to Physicians, who will pay the express charges. Send for our 28 page Pamphlet on Maltine for further particulars.

Address **REED & CARNICK,**

LABORATORY: Yonkers-on-the-Hudson.

193 Fulton St., New York

## FINE PHARMACEUTICAL PRODUCTS

FROM THE LABORATORY OF

# PARKE, DAVIS & CO.

DETROIT, MICH., U. S. A.

New York: 80 Maiden Lane and 21 Liberty Street.

Standard pharmaceutical preparations of the United States and foreign Pharmacopeias, and non-official preparations of large variety. Of the latter class we make a specialty of Fluid Extracts prepared from new and rare drugs from various parts of the world.

FLUID AND SOLID EXTRACTS,  
SUGAR AND GELATINE-COATED PILLS,  
ELIXIRS, WINES, SYRUPS.

RESINOIDS AND CONCENTRATIONS,  
EMPTY GELATINE CAPSULES,  
SOFT FILLED CAPSULES.

## NEW DRUGS.

### FLUID EXTRACTS.

Acetillo Bark.	Cereus McDonaldii.	Iron Wood.	Sabbatia Campestris.
Adruc	Cheken.	Jaborandi.	Sandal Wood.
Ailantus Glandulosa.	Chewstick.	Jamaica Dogwood.	Sarracenia Flava.
Alligator Pear Seeds.	Coca Leaves.	Jamaica Pimento Leaves.	Sassy Bark.
Alstonia Constricta, True.	Cockle Burr.	Judas Tree.	Saw Palmetto.
Anagallis Arvensis.	Coccolmecan.	Juriballi.	Shepherd's Purse.
Areca Nuts.	Corn Silk.	Kamala.	Sierra Salvia.
Bamboo Briar Root.	Coto Bark.	Kava Kava.	Stylosanthes.
Baycuro Root.	Damiana.	Kooso Flowers.	Sundew.
Bearsfoot.	Dita Bark.	Lily of the Valley Flowers.	Thapsia Garganica.
Berberis Aquifolium.	Dubosia Leaves.	Lily of the Valley Root.	Tomato.
Black Haw.	Elephant's Foot.	Manaca.	Tonga.
Blood Flower.	Ephedra Antisyphilitica.	Mango Bark.	Urechites Suberecta.
Boldo Leaves.	Eucalyptus Globulus.	Mango Fruit.	Ustilago Maidis.
California Fever Bush.	Evening Primrose.	Manzanita Leaves.	Vaccinum Crassifolium.
California Laurel.	Ginger, Mexican.	Mercury Weed.	Vervain, White.
Carnauba Root.	Grindelia Robusta.	Mistletoe.	Wild Bergamot.
Caroba Leaves.	Grindelia Squarrosa.	Musk Root.	Yerba Buena.
Cascara Amarga.	Guaco Leaves.	Paraguay Tea.	Yerba Del Manza.
Cascara Sagrada.	Guarana.	Pulsatilla.	Yerba Del Polo.
Cedron Seed.	Helianthella.	Quebracho Bark.	Yerba Reuma.
Cereus Bonplandii.	Honduras Bark.	Quinine Flower.	Yerba Santa.
Cereus Grandiflorus.	Horsemint.	Rhus Aromatica.	Zoapatle.

### SUGAR-COATED PILLS.

Our list of Sugar-coated Pills of the United States and British Pharmacopeias, comprises most of the official and popular formulæ known to the profession, to which we have added several new and valuable combinations. Our pills are made entirely by hand, from the purest materials, and are sugar- and gelatine-coated by the latest and most approved processes. For solubility, regularity of shape, and beauty of finish, they are excelled by none.

**IMPORTANT.**—Our pills being coated while the mass is yet soft, will remain so for years. To be convinced of their extraordinary solubility, it is only necessary to open a few of them—for instance, quinine, chinchonidia, or blue pills, all of which are usually found in the market hard and insoluble. Note also the rapidity with which the coating is dissolved in the saliva.

### GELATINE PHARMACEUTICALS.

One of the greatest improvements of modern pharmacy is the use of Gelatine in various forms to render medicines more sightly, and to disguise their nauseous taste. This has given origin to the Gelatine-coated Pill—a full line of which, of similiar formulæ to our sugar-coated pills, will be found on our list—and also to the Hard and the Soft Gelatine Capsules. We are dispensing Hard Capsules, empty and filled. The Soft Elastic Capsules, however, are from the nature of their formation always filled before leaving our laboratory. These Capsules are so soft and elastic that their walls may be brought into juxtaposition, and yet they will regain their original shape and size when the pressure is removed. This property renders them very easy of deglutition, and they will slip down like an oyster or the yolk of an egg, though the largest of them have a capacity of half a fluid ounce.

### SPECIALTIES.

Warburg's Tincture.	Liquor Ergotæ Purificatus.	Goa Powder.
Solution of Sclerotic Acid.	Chlor-Anodyne.	Crude Petroleum Mass.
Nitrite of Amyl Pearls.	Tonga.	Chian Turpentine.
Sanguis Bovinus Exsiccatus.	Hoang-Nan.	Concentrated Extract Witch Hazel.
Liquor Acidi Phosphorici.	Menthol.	Morure of Mercurio Vegetal.
Liq. Acidi Phosphorici Comp.	Chaulmoogra Oil.	Sugar Test Flasks.
Soluble Elastic Capsules.	Curjun Balsam.	Empty Gelatine Capsules.